Welcome to our Investor Summit

Dana Quattrochi
Investor Relations
agenda

Opening and Closing Remarks
Jonathan Bush • Chief Executive Officer

Financial Expectations
Marc Levine • Chief Financial Officer

Technology and Platform Strategy
Prakash Khot • Chief Technology Officer

Core Services Strategy
Kyle Armbrester • Chief Product Officer

Network Services Strategy
Jonathan Porter • SVP Network Services

Fireside Chat
Tim O’Brien, CMO • Paul Merrild, SVP Sales • Bret Connor, SVP Customer Success
Safe Harbor Statement

This presentation contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, including statements reflecting athenahealth, Inc. (“athenahealth” or “we”) management’s expectations for: future financial and operational performance and operating expenditures; expected growth, including total addressable market, expansion of the network and the related network effect, anticipated revenues, profitability, and bookings; market trends and business outlook, including fiscal 2018 guidance; the anticipated benefits of our service offerings and plans and timelines for developing and expanding those offerings, including expansion and deepening of our services, and market expansion; the anticipated benefits of our investments on our revenue growth, profitability and cash flow; near- and long-term goals for our growth and profitability priorities; marketing and sales plans, strategies, and trends; and cultural, operational, and organizational goals and initiatives, including support for the full continuum of care, continued cost cutting initiatives, scale operations and improve efficiency, investments to support our strategies, improve cost of bookings, help our clients grow their market share, and our focus in 2018; the impact of new accounting pronouncements and tax reform; as well as statements found under our reconciliation of Non-GAAP financial measures included within this presentation. Such statements do not constitute guarantees of future performance, are neither promises nor guarantees, and are subject to a variety of risks and uncertainties, many of which are out of our control, which could cause actual results to differ materially from those contemplated in these forward-looking statements. In particular, the risks and uncertainties include, among other things: our highly competitive industry and our ability to compete effectively and remain innovative; the development of the market for cloud-based healthcare information technology services; changes resulting from a change in administration in the United States; changes in the healthcare industry and their impact on the demand for our services; our ability to effectively manage our growth; the impact of implementation of our strategic plan to improve operational efficiency; our ability to protect our intellectual property; current and future litigation, including for intellectual property infringement; our dependence on third-party providers; risks and costs associated with our worldwide operations; our ability to attract and retain highly skilled employees; our ability to successfully implement any transitions in our management; our fluctuating operating results; our ability to retain our clients and maintain client revenue; our tax liability; our variable sales and implementation cycles; the timing at which we recognize certain revenue and our ability to evaluate our prospects; defects and errors in our software or services, or interruptions or damages to our systems or those of third parties on which we rely; a data security breach; limitations on our use of data; the effect of payer and provider conduct; the failure of our services to provide accurate and timely information; changes in government regulation and the costs and challenges of compliance; the potential for illegal behavior by employees or subcontractors; and the price volatility of our common stock. Existing and prospective investors are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. We undertake no obligation to update or revise the information contained in this presentation, whether as a result of new information, future events or circumstances, or otherwise, except as required by law. For additional information regarding these and other risks faced by us, please see the disclosures contained in our public filings with the Securities and Exchange Commission, available on the Investors section of our website at http://www.athenahealth.com and on the SEC's website at http://www.sec.gov.
Use of Non-GAAP Financial Measures

In our press releases, conference calls, slide presentations, or webcasts, we may use or discuss non-GAAP financial measures, as defined by Regulation G. The GAAP financial measure most directly comparable to each non-GAAP financial measure used or discussed herein, and a reconciliation of the differences between each non-GAAP financial measure and the comparable GAAP financial measure, are available within this presentation and within our public filings with the Securities and Exchange Commission, available on the Investors section of our website at http://www.athenahealth.com.
Opening Remarks

Jonathan Bush
Chief Executive Officer
We are now – and have always been– building the platform for healthcare.
Our purpose

unleashing our collective potential
to transform healthcare
Our purpose

We are the enabler

It’s not just about us – it’s about everyone

unleashing our collective potential
to transform healthcare

We’re changing the industry
Our purpose

Open up the network...  ...multiply its intelligence...  ...and free people to do what matters
**Our purpose**

*unleashing our collective potential to transform healthcare*

**Our Commitments**
- Open the network
- Multiply intelligence
- Free people to do what matters

**Our Fundamentals**
- People
- Culture
- Tech

**Our Results**
- Revenue growth
- Operating results
- Managed risk
Our purpose
unleashing our collective potential to transform healthcare

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Our Commitments
- Open the network
- Multiply intelligence
- Free people to do what matters

Our Fundamentals
- People
  - Teach healthcare and “agile”
- Culture
  - Simple
  - Candid
  - Relevant
  - Edgy
- Tech
  - Microservices
  - Real-time intelligence
  - Debt discipline

Revenue growth
Operating results
Managed risk
Our purpose

unleashing our collective potential to transform healthcare

Our Commitments

- Open the network
- Multiply intelligence
- Free people to do what matters

Our Fundamentals

- People
  - 7-13%
  - Revenue growth
- Culture
  - 16-17%
  - Operating income
- Tech
  - Diversify revenue through new services and markets

Our Results

- Operating results
- Managed risk

© athenahealth
Our purpose
unleashing our collective potential to transform healthcare

Our Commitments
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- Multiply intelligence
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Our Fundamentals
- People
- Culture
- Tech

Our Results
- Revenue growth
- Operating results
- Managed risk
In order to achieve our vision, we will invest in three growth markets over the next five years.

Horizon 1:
The Doctor in Practice

PLATFORM FOUNDATION
Microservices • Scale • Performance
In order to achieve our vision, we will invest in three growth markets over the next five years.

**MARKET OPPORTUNITY**

- **Horizon 1:** The Doctor in Practice
- **Horizon 2:** Hospitals & Ancillaries
- **Horizon 3:** Employers & Payers

**PLATFORM FOUNDATION**

- Microservices
- Scale
- Performance
Financial Expectations

Marc Levine
Chief Financial Officer
### 2017 financial and operational highlights

<table>
<thead>
<tr>
<th>Category</th>
<th>2017 Highlight</th>
<th>YoY Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Revenue</td>
<td>$1.220B</td>
<td>13%</td>
</tr>
<tr>
<td>GAAP/Non-GAAP OP Inc(^1)</td>
<td>$71M/$175M</td>
<td>5.8%/14.3%</td>
</tr>
<tr>
<td>Collector Providers</td>
<td>111K</td>
<td>15%</td>
</tr>
<tr>
<td>Discharge Bed Days</td>
<td>73K</td>
<td>&gt;500%</td>
</tr>
<tr>
<td>Operating Cash Flow</td>
<td>$241M</td>
<td>32%</td>
</tr>
<tr>
<td>Covered Lives</td>
<td>3.3M</td>
<td>48%</td>
</tr>
</tbody>
</table>

\(^1\) See non-GAAP reconciliation tables included in the appendix to this presentation as well as in the 2/1/18 press release.
While we remain focused on growth, we see opportunity for operating income expansion

Note: These estimates reflect our current operating plan as of February 15, 2018, and are subject to change as future events and opportunities arise. Furthermore, our 2018 guidance is prior to the impact of any new accounting standards, including ASC 606, to allow for comparability against historical results.

1 See non-GAAP reconciliation tables included in the appendix to this presentation as well as in the 2/14/18 press release.
Our large installed base of recurring revenue provides a foundation for future growth and margin expansion.

% Share of 2018 Revenue Budget

Key Assumptions

Existing Client Base
- Client Retention
- Utilization
- Client Ramp

Backlog & Bookings
- 1H 2018 Bookings
- Implementation Timelines

Note: These estimates reflect our current operating plan as of February 15, 2018, and are subject to change as future events and opportunities arise. Furthermore, our 2018 guidance is prior to the impact of any new accounting standards, including ASC 606, to allow for comparability against historical results.
Based on the investment opportunity horizon, we’ll seek an optimal balance between revenue growth, operating margin, and free cash flow.

1. Continuously identify and generate **operating efficiencies across the business**

2. Carefully select investments with: **high return and high growth contributions**

3. Focus and flawlessly deliver the select strategic initiatives
We plan to increase investment in Research & Development to support our near term product and technology initiatives.

Cash Research & Development

Note: These estimates reflect our current operating plan as of February 15, 2018, and are subject to change as future events and opportunities arise. Furthermore, our 2018 guidance is prior to the impact of any new accounting standards, including ASC 606, to allow for comparability against historical results.
Despite increased investment in Research & Development, we expect profitability to improve significantly in fiscal year 2018

GAAP Operating Margin (0.4%) 2.5% 5.8% 8% - 11%
Non-GAAP Operating Margin 10.3% 12.2% 14.3% 16% - 17%

Note: These estimates reflect our current operating plan as of February 15, 2018, and are subject to change as future events and opportunities arise. Furthermore, our 2018 guidance is prior to the impact of any new accounting standards, including ASC 606, to allow for comparability against historical results.

1 See non-GAAP reconciliation tables included in the appendix to this presentation as well as in the 2/14/18 press release.
We will expand operating leverage through a combination of revenue scale and net expense savings

Non-GAAP Operating Margin

<table>
<thead>
<tr>
<th>Year</th>
<th>GAAP Operating Margin</th>
<th>Net Expense Savings</th>
<th>2016</th>
<th>2017</th>
<th>2018 Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>2.5%</td>
<td>+210 bps</td>
<td>12.2%</td>
<td>14.3%</td>
<td>16% - 17%</td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td>+170-270 bps</td>
<td></td>
<td></td>
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</tbody>
</table>

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1 See non-GAAP reconciliation tables included in the appendix to this presentation as well as in the 2/14/18 press release.
Our fiscal year 2018 growth and profitability expectations…

### Fiscal Year 2018 Expectations

<table>
<thead>
<tr>
<th>Financial Measures</th>
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</thead>
<tbody>
<tr>
<td>GAAP Revenue</td>
<td>$1,310 million - $1,380 million</td>
</tr>
<tr>
<td>GAAP Operating Income</td>
<td>$108 million - $152 million</td>
</tr>
<tr>
<td><strong>GAAP Operating Margin</strong></td>
<td>8% - 11%</td>
</tr>
<tr>
<td>Non-GAAP Operating Income(^1)</td>
<td>$210 million - $235 million</td>
</tr>
<tr>
<td><strong>Non-GAAP Operating Margin(^1)</strong></td>
<td>16% - 17%</td>
</tr>
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\(^1\) See non-GAAP reconciliation tables included in the appendix to this presentation as well as in the 2/14/18 press release.
Expected Impact of the Adoption of ASC 606 on our results

Revenue

- Seasonality may change as revenue will be dependent on claims to be submitted vs. collections
- Upon adoption, elimination of deferred revenue will not have a significant impact
- No new “upfront” revenue that certain software and hosted software companies may have

Operating Income

- Defer certain commissions costs for 12 years
- Defer certain professional services set-up costs (pre-go-live) for 12 years

Balance Sheet

- Increased capitalized long-term assets for deferred commissions & professional services set-up costs
- Decreased deferred revenue for non-refundable up-front fees previously deferred for 12 years
Expected Impact of Tax Reform on our results

Non-GAAP Tax Rate
- 2017: 40%
- Expected for 2018: 25%

As primarily a domestic company, many of the major impacts of the tax reform will not significantly impact us

Our Tax Provision & Cash Taxes Paid
- We have historically paid a nominal amount of taxes
- Due to our cost reduction initiatives – outside of the impact of this reform – we will begin to pay a higher level of cash taxes
- We estimate 2018 cash taxes of ~$5M - $10M
Key Takeaways

Plan to strike an optimal balance between revenue growth, operating income, and free cash flow.

Committed to executing with greater discipline, clarity, and consistency.

Well positioned to drive long-term profitable growth and enhance shareholder value.
Presentation Break
Technology & Platform Strategy

Prakash Khot
Chief Technology Officer
The promise of the platform

WE ARE COMMITTED TO:

Opening up the network  Multiplying its intelligence  Freeing people to do what matters

IN THE PURSUIT OF DELIVERING A PLATFORM FOR HEALTHCARE THAT IS:

Fast, scalable, cost efficient, resilient, collaborative, and infinite in possibilities.
105,844,599

Patients since 2000
124,438,549
Patient visits in 2017
Interface transactions in 2017

9,951,931,138
Clinical orders processed in 2017

175,388,270
91,872,238

Prescription orders processed in 2017
34,357,288

Lab result orders processed in 2017
1,452,196

Epocrates unique users in 2017
90% 

Document classifications performed with machine learning in 2017
Increase in “ready for release” features since March 2017

190%
2017 was – by the numbers – athenaNet’s best year ever

but from a technology and platform perspective, that’s not the whole story.
The healthcare internet vision demands the availability of intelligent and networked enabled services

<table>
<thead>
<tr>
<th>OUR PROJECT</th>
<th>PRE-VISIT</th>
<th>VISIT</th>
<th>POST-VISIT</th>
<th>ON-GOING</th>
</tr>
</thead>
<tbody>
<tr>
<td>The healthcare internet vision</td>
<td>Provider and Practice Enrollment</td>
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<td>Linkedin for doctors</td>
<td>Facebook for appointments</td>
<td>Tripit for patients</td>
<td>Uber for referrals</td>
<td>Venmo for claims</td>
</tr>
<tr>
<td>CURRENT STATE</td>
<td>Faxes and forms</td>
<td>Phone tag and appointment requests</td>
<td>Clipboards and photocopies</td>
<td>Documents and Templates</td>
</tr>
</tbody>
</table>
Despite athenaNet’s success, our applications are still only semi-automatic.

Our outstanding year required the support of:

4,238+ Engineers, product managers, customer success and operations athenistas

4,438+ Business Process Office workers

endless Efforts for transparency
Modern systems demand distributed data models that can support growing network effects
Browser -> Internet -> Redundant content switches

Load-balanced proxy server pool (Apache / mod_proxy / mod_ssl)

Encrypt / decrypt
Proxy to correct app server pool
Static document serving

Separate load-balanced app. server pools (Apache / mod_perl)

... Etcetera ...

Individual practice databases (Scheers), grouped together on DB instances ("stacks") (Oracle)

"Stack 2"
"Stack 3"
... "Stack n" ...

"Root" stack — data common across all practices (e.g. payer information, rules). Read-only copy "snapplotted" to all the other DB instances
We launched a transformation last year that we’ve already made great progress against

1. Migrate to microservices architecture
2. Adopt mobile and social, purpose-built apps
3. Adopt a progressive Agile culture and process
4. Complement private cloud with public cloud
5. Adoption of open source technologies to build new capabilities
6. Enable developers to adopt choice of programming languages and frameworks
7. Test-driven development
8. Adopt a container-based deployment architecture
9. Evolve towards a true bottoms-up product and R&D culture
10. Sustained investment in platform
We launched a transformation last year that we’ve already made great progress against

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8. Adopt a container-based deployment architecture
Continuously re-platforming athenaNet remains a paramount initiative

- “Serengeti” platform division is functional and fully staffed
- Established a well understood Platform definition
- Established and executed on a transformational strategy
- Bootstrapped and built several foundational and domain microservices
- The first 10 microservices will see daylight and significant adoption during 2018

2017

- Continued re-platforming

2018
We are prioritizing and categorizing services based on:
• Risk
• Resiliency
• Performance
• Expansion
• Innovation
We already have a diverse portfolio of microservices planned for 2018 and beyond.
We are dramatically boosting R&D efficiency as we develop across the platform

QUALITY MANAGEMENT AS A SERVICE

7x greater efficiency in R&D
60+% reduction in people cost

"One Patient, One Measure, One Status"
We are generating true network effect in our services built on top of our provider and patient networks.

**SCHEDULING SERVICE**

- athenaNet
- External hospital system
- External ambulatory system

**APIs, widgets, and other interfaces**

- Scheduling Enterprise Connector Framework
- Booking Service
- Availability Service
- Prediction Service

**Scheduling Data Store**
We are using machine learning to take on work at scale, while delivering the most cost-effective and efficient services.

**AUTOMATED SERVICES**

- **Split** → **Categorize** → **Data Capture** → **Select** → **QA** → **Clinical Data Entry** → **Reconcile**

**Data Science Client API (Perf)**

- **API Gateway** → **Load Balancer**

**REST API Servers** → **Kafka Data Queue**

- **Request 1**
- **Request 2**
- **Request n**

**Prediction Engine (Python)** → **Trained ML Model**

**Serving Cloud** (athena prod/DCOS or AWS)

- **ML Model Store** (Artifactory or S3)

**athena.intelligence designed, configured, & maintained**
The platform will foster an architecture of collaboration
…which will enable the creation of the healthcare internet

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<tr>
<td>National Provider Directory</td>
<td>National Calendar Service</td>
<td>Clipboards and Photocopies</td>
<td>Documents and Templates</td>
<td>Orders as a Service</td>
<td>Batches and Errors</td>
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<td></td>
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<td>300K+ Epocrates providers with access to coordination</td>
<td>Al as a Service</td>
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The age of the platform

WE ARE COMMITTED TO:

Opening up the network  Multiplying its intelligence  Freeing people to do what matters

IN THE PURSUIT OF DELIVERING A PLATFORM FOR HEALTHCARE THAT IS:

Fast, scalable, cost efficient, resilient, collaborative, and infinite in possibilities.
Core Services Strategy

Kyle Armbrester
Chief Product Officer
Core Services is focused on executing against our commitments and delivering results

Our purpose

unleashing our collective potential to transform healthcare

Our Commitments

- Open the network
- Multiply intelligence
- Free people to do what matters

Our Fundamentals

- People
- Culture
- Tech

Our Results

- Revenue growth
- Operating results
- Managed risk
We are doubling Value Per Visit by taking on significant additional work from clients’ plates

We are breaking down data silos and driving enhanced connectivity across health systems, while also doubling our hospital services footprint

We are increasing client market share using network insights

Open Up The Network

Multiply Intelligence

Free People To Do What Matters
Open Up The Network

1. We are breaking down data silos and driving enhanced connectivity across health systems, while also doubling our hospital services footprint

Network Depth
Extend native customers on the network

Network Expansion
Make it easier to connect to the network
We are expanding across the continuum through both enhanced connectivity to legacy incumbents and full system displacement at the lower end of the market.
We are expanding our interoperability coverage across the continuum

% sites accessible by Patient Record Sharing out of known sites eligible to be accessible by Patient Record Sharing

- **athenahealth**

- **Cerner**

- **Epic**
  - Via Carequality: 72% (2017), 0% (2016), 20% (2015)

Note: 1) athena & Epic reported on organization level while Cerner is reported on a facility level; 2) Cerner numbers are self-reported; and 3) Cerner & Epic include ambulatory sites.

*Epic 2017 numbers are from Jan 2018.

“Our physician technology satisfaction scores have significantly increased since we implemented athenaClinicals, replacing NextGen and Cerner ambulatory EHRs. The transition to athenaClinicals was rapid and smooth, physician adoption has been strong, and the physicians are actively leveraging the integration between athenaClinicals and Cerner inpatient.”

- Bryan Stiltz, SVP, Physician Enterprise, Adventist Health System
Interoperability expansion will enrich the network intelligence feeding into our clinical workflows both on desktop and mobile

### Clinicals Timeline

**Intelligent navigation of patient information**

- Epic

### Epocrates branded

**Intelligent, virtual medical assistant**

- Reduces charting time by 30%
- Powered by machine learning and natural language processing
- Single pane of glass between inpatient and outpatient

**INFOGRAPHIC**

- Information via mObjects, CCL, and CommonWell
- Carequality
- Powered by machine learning
- Intelligent navigation of patient information
- Epic
- Epocrates branded
- Single pane of glass between inpatient and outpatient
- Information via mObjects, CCL, and CommonWell
In 2017, we continued significant strides in our hospital segment and were recognized by KLAS as a category leader for 2018

"Within just a few short months of going live on athena’s cloud platform, we exceeded our expectations with a 75 percent increase in cash collections over baseline. For the first time ever, we’re fulfilling every single behavioral Meaningful Use measure and are on track to attest successfully in 2017."

- Brad Huerta, CEO, Lost Rivers

"When we first partnered with athena, our time in accounts receivable was close to 100 days—now, thanks to increased efficiencies in our revenue cycle, it’s down to 44."

- Kimberly Dalrymple, CFO Cascade Medical Center

Hospitals
NPS
Accounts
47.8
62
14
Hospital
Live
Showcase
Our cash flow success is resonating in market - while our other key revenue cycle metrics show continued improvement and stability

<table>
<thead>
<tr>
<th>Metric</th>
<th>2016</th>
<th>2017</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash flow as a % baseline trend</td>
<td>103%</td>
<td>106%</td>
<td>3% increase</td>
</tr>
<tr>
<td>Discharged Not Final Billed (DNFB) Median</td>
<td>14.7 days</td>
<td>11.5 days</td>
<td>22% decline</td>
</tr>
<tr>
<td>Days Accounts Receivable (DAR) Median</td>
<td>59.0 days</td>
<td>54.7 days</td>
<td>8% reduction</td>
</tr>
</tbody>
</table>
Multiply Intelligence

2. We are increasing client market share using network insights
49% of provider executives said revamping the patient experience is one of their organization’s top three priorities over the next five years. Many already have or are building the role of chief patient experience officer.

PwC Health Research Institute
Top health industry issues of 2018: A year for resilience amid uncertainty

Roughly 42 percent of commercially insured Americans are enrolled in a HDHP with an annual deductible of $1,300 or more.

Deloitte 2017 Survey of US Health System CEOs
Deloitte Center for Health Solutions
47%  
Click thru rate on care gap outreach messages

27%  
Scheduling rate for Medicare Annual Wellness Visit

13%  
Flu vaccine outreach led to 13% care gap closure in just one month

$46M  
In incremental client revenue driven through Medicare Annual Wellness Outreach (~450k patient scheduled)
Through intelligence-driven outreach campaigns, we are taking on the work for providers to target and engage patients who should schedule a visit.

<table>
<thead>
<tr>
<th>Campaign</th>
<th>Q1 Jan</th>
<th>Q1 Feb</th>
<th>Q1 Mar</th>
<th>Q1 Apr</th>
<th>Q1 May</th>
<th>Q1 Jun</th>
<th>Q2 Jul</th>
<th>Q2 Aug</th>
<th>Q2 Sep</th>
<th>Q2 Oct</th>
<th>Q2 Nov</th>
<th>Q2 Dec</th>
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<tr>
<td>Communicator Triggers</td>
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<td>ReminderCall</td>
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<td>Self-Pay</td>
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<td>Guest Pay</td>
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<td>Appointment Confirm.</td>
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<td>OM Campaigns Optimizations</td>
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<td>Colon Cancer</td>
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<td>Breast Cancer</td>
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<td>Diabetes Gaps</td>
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<tr>
<td>Annual Wellness Visit</td>
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<tr>
<td>Well Child Visit</td>
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<td>HPV Vaccine</td>
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<td>Recommended Vaccine</td>
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<td>Flu Vaccine</td>
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</tbody>
</table>

- **Existing Ongoing Comm.**
- **Comm. Beta Group Experimental Testing**
- **Pop Health Clients Experimental Testing**
- **AWO Clients Experimental Testing**
- **GA**

Free People To Do What Matters

3 We are doubling Value Per Visit by taking on significant additional work from clients’ plates
While EHR adoption is at an all time high, so is provider burnout from increasing administrative burden and general system fatigue.
In response, we’re focused on reducing work from providers, and completed foundational work in 2017 to measure and project the impact we can drive.

**Path to Dramatic Value Expansion**

- **Time Motion Study**
  - 23.5k data points collected from initial study thus far to baseline time for users to complete common tasks

- **Workflow Heuristics**
  - 609 experience design opportunities identified from an audit of 55 workflows in athenaNet

- **Value per visit from our core services**
  - 2x
We have good line of sight on the investments we need to make to double value per visit over the next 2 years.
We are driving work reduction through service depth and expansion, yielding an uptick to value per visit

**Overpayments**
Live across the base
- Causes ~40% of Posting cases each year
- Reduces an average of 5 hours per provider per year
- One initial Enterprise client was able to eliminate 11 FTE because of this shift

**Authorization Mgmt**
Live and expanding in 2018
- ~70M authorizations per year, 7 mins per phone authorization
- Physicians loathe this work: “This is a godsend” - Lost Rivers
- Contributes to athena’s TCO by alleviating 0.5 FTE of client work per provider

**Coding-Related Denials**
Live across base in Q1 2018
- We address these claims 6 days faster than our clients
- Yields $25 more revenue per resubmitted claim
- Reduces an average of 2 hours per provider per year

**Launching for hospitals in 2018, further expanding in 2019**

**Coding Underway**
- 44% of rural hospitals cited Coding as top tech issue impacting organizational revenue
- Takes current clients as long as 4 days
- Small community hospitals spend an average of $65,000 per year on salary for a coder

In 2018, we are doubling the document services processing for our providers and staff at no additional cost to them, and at less cost to us.

Our providers receive 120M+ paper documents that come through fax, mail, and in-person visits.

We’ve applied machine learning to document processing steps – seeing automation rates up to 90%.

As a result, we’ve driven down unit costs, creating scaling capacity to take on 100% of documents for less spend.

<table>
<thead>
<tr>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>110 hours saved per provider</td>
<td>200 hours saved per provider</td>
</tr>
<tr>
<td>3.2 minutes saved per visit</td>
<td>5.9 minutes saved per visit</td>
</tr>
</tbody>
</table>

- Eliminated millions of hours of fax processing
- Dark launched machine learning to prove up to 90% automation rates on doc processing steps
- Will take on 100% of documents from clients, expanding to cover those generated inside a practice as well, doubling what we process today.
We are removing the work to find, engage, and collect from patients

**Patient Outreach and Scheduling**

Current Value Per Visit: $0.49  
Expanded Value Per Visit: $1.74

**CHALLENGE**

15% average care gap closure rate for call centers.

**SOLUTION**

Patient outreach services – optimization strategies are showing uptick in self-check in rates  
Web scheduling – recent campaigns showed a 30% increase in web scheduled appointments, saving an estimated 300 hours of staff time

**Patient HPI/ROS (History of Present Illness/Review of Systems)**

Current Value Per Visit: $0.50  
Expanded Value Per Visit: $1.50

**CHALLENGE**

5 minutes of staff time spent documenting for ROS per patient.

**SOLUTION**

Digital check-in allows for electronic HPI/ROS documentation by the patient (alpha by end of 2018, live in early 2019)

**Patient Pay Improvements**

Current Value Per Visit: $0.89  
Expanded Value Per Visit: $1.29

**CHALLENGE**

It costs healthcare organizations $2.41 in administrative costs to collect from a patient.

**SOLUTION**

Guest Pay (live in March 2018)  
Self Service Payment Plans (alpha by end of 2018, live in early 2019)

We’ve pushed workflow simplifications that materially reduce staff time on task

Claim Action Workflow – live
4 pages & 9 steps → 1 page & 4 steps

Clinical Timeline with Patient Record Sharing - live

~50% reduction in time on task

“Saves me up to 30 mins / day”

Quickly scan patient history
Click into fewer documents
Open Up The Network

1. We are breaking down data silos and driving enhanced connectivity across health systems, while also doubling our hospital services footprint

Multiply Intelligence

2. We are increasing client market share using network insights

Free People To Do What Matters

3. We are doubling Value Per Visit by taking on significant additional work from clients’ plates
Network Services
Strategy

Jonathan Porter
SVP, Network Services
Solving the healthcare cost problem requires us to support both sides of the healthcare payment transaction

2016 U.S. Healthcare Expenditures: $3.3 trillion

- **72 cents** on every dollar goes to clinical care
- **10 cents** on every dollar goes to non-clinical care costs
- **18 cents** on every dollar goes to billing and insurance-related costs

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4283267/
Our strategy is to leverage current network capabilities to open new horizons.
If we were going to start from scratch, here’s what we would need to do:

<table>
<thead>
<tr>
<th>CAPABILITIES REQUIRED TO ENTER THE THIRD HORIZON: PAYER/EMPLOYER</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>CLAIMS ADMINISTRATION</th>
<th>PROVIDER SERVICES</th>
<th>MEMBER SERVICES</th>
<th>3RD PARTY SERVICES</th>
<th>NETWORK MANAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Claim processing and adjudication</td>
<td>Provider Enrollment</td>
<td>Wellness programs</td>
<td>Medical Management</td>
<td>Leased PPO networks (lease)</td>
</tr>
<tr>
<td>Provider payment processing</td>
<td>Provider Portal</td>
<td>Member enrollment</td>
<td>Utilization Management</td>
<td>Reference-based pricing arrangements</td>
</tr>
<tr>
<td>Coordination of Benefits</td>
<td>Provider Call Center</td>
<td>Member Education Materials</td>
<td>PBM</td>
<td>Network contracting and negotiation</td>
</tr>
<tr>
<td>Claim status</td>
<td>Eligibility and Authorization:</td>
<td>Member Service/Call Center</td>
<td>Stop Loss Prevention &amp; Reinsurance</td>
<td>Network selection</td>
</tr>
<tr>
<td>Claims auditing</td>
<td>• Eligibility maintenance</td>
<td>Member on-line self-service capabilities</td>
<td>Health Savings Account (HSA) Administration</td>
<td>Network performance monitoring</td>
</tr>
<tr>
<td>Claims subrogation</td>
<td>• Real-time eligibility verification for providers</td>
<td>ID cards</td>
<td>Care management programs</td>
<td></td>
</tr>
<tr>
<td>Payment recovery capabilities</td>
<td>• Pre-admission review</td>
<td>Summary plan descriptions/evidence of coverage documentation</td>
<td>Care/Disease Management programs</td>
<td></td>
</tr>
</tbody>
</table>

- Claims
- Pricing
- Utilization
- Enrollment
- Employee Portal
- Clinical program impact
- Provider profiling
- Network access
- Member satisfaction
- Stop-loss reporting
- Reporting & Analytics

- Provider Enrollment
- Provider Portal
- Provider Call Center
- Eligibility and Authorization:
  - Eligibility maintenance
  - Real-time eligibility verification for providers
  - Pre-admission review
  - Precertification of services
  - Appeals/Grievance function
  - Utilization review/management (UR/UM)
  - Clinical Concurrent review
  - Retrospective review

- Wellness programs
- Member enrollment
- Member Education Materials
- Member Service/Call Center
- Member on-line self-service capabilities
- ID cards
- Summary plan descriptions/evidence of coverage documentation
However, over 20 years we have built capabilities that we can leverage

Capabilities required to enter the third horizon: **payer/employer**

<table>
<thead>
<tr>
<th></th>
<th>CURRENT ATHENAHEALTH CAPABILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CLAIMS ADMINISTRATION</td>
</tr>
<tr>
<td>2</td>
<td>EMPLOYER SERVICES</td>
</tr>
<tr>
<td>3</td>
<td>PROVIDER SERVICES</td>
</tr>
<tr>
<td>4</td>
<td>MEMBER SERVICES</td>
</tr>
<tr>
<td>5</td>
<td>3RD PARTY SERVICES</td>
</tr>
<tr>
<td>6</td>
<td>NETWORK MANAGEMENT</td>
</tr>
</tbody>
</table>

- N/A: Not Available
We have deep experience in administering claims on a national scale

Sets of capabilities required to enter the third horizon: **payer/employer**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLAIMS ADMINISTRATION</td>
<td>EMPLOYER SERVICES</td>
<td>PROVIDER SERVICES</td>
<td>MEMBER SERVICES</td>
<td>3RD PARTY SERVICES</td>
<td>NETWORK MANAGEMENT</td>
</tr>
</tbody>
</table>

**Remittance (associated cost)**

<table>
<thead>
<tr>
<th></th>
<th>PROVIDER</th>
<th>PAYER</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PROVIDER</strong></td>
<td>$0.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PAYER</strong></td>
<td>$4.74</td>
<td></td>
<td>$5.19</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td>$5.19</td>
</tr>
</tbody>
</table>

**Remittance Rates**

- **athenahealth**: 86.7%
- **Industry average**: 55%

Our Core Services investments align with key Horizon 3 functions

Sets of capabilities required to enter the third horizon: payer/employer

1. CLAIMS ADMINISTRATION
2. EMPLOYER SERVICES
3. PROVIDER SERVICES
4. MEMBER SERVICES
5. 3RD PARTY SERVICES
6. NETWORK MANAGEMENT

Eligibility (associated cost)

<table>
<thead>
<tr>
<th></th>
<th>2017 client work</th>
<th>2018 athenahealth work</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROVIDER</td>
<td>$4.29</td>
<td>$3.64</td>
</tr>
<tr>
<td>PAYER</td>
<td>$3.60</td>
<td>$5.61</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$7.89</td>
<td>$9.25</td>
</tr>
</tbody>
</table>

Prior Authorization (associated cost)

<table>
<thead>
<tr>
<th></th>
<th>2017 client work</th>
<th>2018 athenahealth work</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROVIDER</td>
<td>$3.64</td>
<td>$3.64</td>
</tr>
<tr>
<td>PAYER</td>
<td>$5.61</td>
<td>$5.61</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$9.25</td>
<td>$9.25</td>
</tr>
</tbody>
</table>

Authorization Management

- **2017 client work**: 7 minutes per phone authorization
- **2018 athenahealth work**: ~70M authorizations manually performed per year
- **0.5 FTE reduction in client work per provider**

...and investments in our network will differentiate us

Sets of capabilities required to enter the third horizon: payer/employer

1. CLAIMS ADMINISTRATION
2. EMPLOYER SERVICES
3. PROVIDER SERVICES
4. MEMBER SERVICES
5. 3RD PARTY SERVICES
6. NETWORK MANAGEMENT

A coordinated provider network...

- Efficient
- Accessible
- Effective

...that engages the consumer network

- Transparent
- Convenient
- Valued

111K providers
18% of all U.S. patients last year
106M total patient records
In 2018, we will strengthen our network effect by focusing on three areas:

1. Coordination
2. Access
3. Quality
In 2018, we will strengthen our network effect by focusing on three areas:

1. Coordination
2. Access
3. Quality
55% of patients report that their medical history is missing or incomplete when they visit their doctor.

95% of physicians have experienced difficulty delivering medical care because patients’ records were not easily accessible.
Epocrates and athenaWell provide easy access to our coordinated care network for any individual provider or patient.

Epocrates: Intelligent, virtual medical assistant
- 30% reduction in charting time
- Powered by machine learning and natural language processing
- Single pane of glass between inpatient and outpatient

athenaWell: Intelligent navigation of patient information
- Pre-loaded care teams using our national patient and provider directories
- Patient-centered care plan
- Real-time communication tools to improve care coordination

Beta Q2-2018 | GA Q4-2018 | Beta Q3-2018 | GA Q4-2018
In 2018, we will strengthen our network effect by focusing on three areas:

1. Coordination
2. Access
3. Quality
Most specialties see a 2 to 3 week appointment wait time … and yet, nearly 30 percent of all appointments go unused

2016 athenaNet data
## Booking time to appointment time has a high impact on yield

<table>
<thead>
<tr>
<th>Time to Appointment</th>
<th>Appointment Yield</th>
<th>Yield</th>
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<tbody>
<tr>
<td>&lt;1 Week</td>
<td>Completed</td>
<td>90%</td>
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<tr>
<td></td>
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<tr>
<td>1 Week</td>
<td>Completed</td>
<td>85%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Weeks</td>
<td>Completed</td>
<td>70%</td>
</tr>
<tr>
<td></td>
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<td></td>
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<tr>
<td>4 Weeks</td>
<td>Completed</td>
<td>63%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Weeks</td>
<td>Completed</td>
<td>58%</td>
</tr>
</tbody>
</table>

*2016 athenaNet data*
Our national calendar service will be a platform for matching supply and demand in healthcare

1% increase in scheduling yield would generate $300M in client revenue
In 2018, we will strengthen our network effect by focusing on three areas:

1. Coordination
2. Access
3. Quality
4 to 8 hours are spent per week per physician documenting measures for quality reporting

Our untethered quality engine and clinical decision support tools will allow clients to define quality and apply network rules at the point of care.

2014-2016

athenahealth had success with quality programs

- Providers avoided **$265M** in penalties and received **$182M** in incentive payments for MU & PQRS
- We posted payment for **over 400** other quality programs

2017+

Quality Management as a Service and Clinical Decision Support

Beta Q3-2018 | GA Q4-2018
Our untethered quality engine and clinical decision support tools will allow clients to define quality and apply network rules at the point of care.
Once we have tackled our three main areas of…

- Coordination
- Access
- Quality

…we will have created the most coordinated and engaged provider and consumer networks in healthcare

**Provider network**
- Efficient
- Accessible
- Effective

**Consumer network**
- Transparent
- Convenient
- Valued
...positioning us for entry into **Horizon 3**

Sets of capabilities required to enter the third horizon: **payer/employer**

1. **CLAIMS ADMINISTRATION**  
2. **EMPLOYER SERVICES**  
3. **PROVIDER SERVICES**  
4. **MEMBER SERVICES**  
5. **3RD PARTY SERVICES**  
6. **NETWORK MANAGEMENT**

---

**Horizon 3:** Employers & Payers

**Market Opportunity** vs. **Time**

**Platform Foundation**
- Microservices
- Scale
- Performance

© athenahealth
Presentation Break
Fireside Chat

Stephen Kahane, M.D., M.S.
Strategic Solutions
Panelists

Tim O’Brien
Chief Marketing Officer

Paul Merrild
SVP Sales

Bret Connor
SVP Customer Success
Management Q&A
Closing Remarks

Jonathan Bush
Chief Executive Officer
We are unleashing our collective potential

1 Opening the network 2 Multiplying intelligence 3 Freeing people to do what matters
Please join us:
Lunch with Management
Thank You
Appendix
Additional points of interest for fiscal year 2018

It is best to assess our business on a year-over-year basis as there is typically an increase in expense levels during Q1 versus Q4.
- FICA payroll tax reset, benefit rate changes, trade shows, etc.

The number of working days varies each quarter, impacting collections during each period:

<table>
<thead>
<tr>
<th>Q1 17</th>
<th>Q2 17</th>
<th>Q3 17</th>
<th>Q4 17</th>
<th>Q1 18</th>
<th>Q2 18</th>
<th>Q3 18</th>
<th>Q4 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>62</td>
<td>64</td>
<td>63</td>
<td>61</td>
<td>62</td>
<td>64</td>
<td>63</td>
<td>62</td>
</tr>
</tbody>
</table>

Our estimated FY 2018 capital expenditures, excluding capitalized software, is approximately 4% of consolidated revenue.

Our estimated FY 2018 stock-based compensation expense range, including an amortization of capitalized stock-based compensation related to software development, is approximately $52 million to $63 million.

Our estimated FY 2018 amortization of purchased intangible assets range is approximately $19 million to $20 million.

Our estimated FY 2018 integration and transaction costs range is approximately $10 million to $13 million.

Our estimated FY 2018 exit costs, including restructuring costs range is approximately $2 million to $6 million.

Our expected FY 2018 weighted average basic share count is approximately 40.4 million.

Our expected FY 2018 weighted average diluted share count is approximately 41.3 million.

Please note that these statements as well as all facts and figures presented above reflect our beliefs as of February 15, 2018 only, and we undertake no obligation to update these forward-looking statements, except as required by law. In addition, forward-looking statements do not constitute guarantees of future performance. Lastly, our 2018 guidance is prior to the impact of any new accounting standards, including ASC 606, to allow for comparability against historical results.
## Implementation cycle times for ambulatory, small hospital, and population health deals

<table>
<thead>
<tr>
<th></th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulatory</td>
<td>Kickoff (6 months)</td>
<td>Ramp (6 months)</td>
<td></td>
<td></td>
<td>Kickoff (6 months)</td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td>Kickoff (12 months)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ramp (6 months)</td>
</tr>
<tr>
<td>Population Health</td>
<td>Kickoff (7 months)</td>
<td>Ramp (4 months)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company Average</td>
<td>Kickoff (6 months)</td>
<td></td>
<td>Ramp (6 months)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The implementation timelines and ramp periods illustrated above are directional and may vary by sales segment and service.
Key metric definitions

Providers
The number of providers, including physicians, that have rendered a service which generated a medical claim that was billed during the last 91 days on the athenaCollector platform. Examples of physicians include Medical Doctors and Doctors of Osteopathic Medicine. Examples of non-physician providers are Nurse Practitioners and Registered Nurses.

Discharge Bed Days
Discharge bed days is defined as the number of days a patient is hospitalized in an inpatient level of care during the quarter. The day of the admission, but not the day of discharge, is counted. If both admission and discharge occur on the same day, it is counted as one inpatient day.

Covered Lives
Covered lives on the network is defined as the quarterly average of the number of patients for which we have eligibility, claims, pharmacy or risk data in the Population Health platform, for a given client in a given month.
Reconciliation of Non-GAAP Financial Measures to Comparable GAAP Measures
## Non-GAAP reconciliation

### GAAP Operating Income and Non-GAAP Operating Income

<table>
<thead>
<tr>
<th></th>
<th>$Millions</th>
<th>Fiscal Year Ending December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2017</td>
<td>2016</td>
</tr>
<tr>
<td>Total revenue</td>
<td>$1,220.3</td>
<td>$1,082.9</td>
</tr>
<tr>
<td>GAAP operating income (loss)</td>
<td>$70.6</td>
<td>$26.6</td>
</tr>
<tr>
<td><strong>GAAP operating margin (loss)</strong></td>
<td>5.8%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Add: Stock-based compensation expense</td>
<td>54.3</td>
<td>66.5</td>
</tr>
<tr>
<td>Add: Amortization of capitalized stock-based compensation related to software development</td>
<td>2.8</td>
<td>5.0</td>
</tr>
<tr>
<td>Add: Amortization of purchased intangible assets</td>
<td>19.1</td>
<td>20.8</td>
</tr>
<tr>
<td>Add: Integration and transaction costs</td>
<td>9.5</td>
<td>2.4</td>
</tr>
<tr>
<td>Add: Exit costs, including restructuring costs</td>
<td>18.7</td>
<td>11.3</td>
</tr>
<tr>
<td>Less: Gain on investments, net</td>
<td>---</td>
<td>(0.3)</td>
</tr>
<tr>
<td>Non-GAAP Operating Income</td>
<td><strong>$175.0</strong></td>
<td><strong>$132.3</strong></td>
</tr>
<tr>
<td><strong>Non-GAAP Operating Margin</strong></td>
<td>14.3%</td>
<td>12.2%</td>
</tr>
</tbody>
</table>

Please note that the figures presented above may not sum exactly due to rounding.
2018 Guidance
## Non-GAAP reconciliation for fiscal year 2018 expectations

<table>
<thead>
<tr>
<th>GAAP Operating Income and Non-GAAP Operating Income</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fiscal Year Ending December 31, 2018</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total revenue</td>
<td>$1,310</td>
<td>$1,380</td>
</tr>
<tr>
<td>GAAP operating income</td>
<td>$108</td>
<td>$152</td>
</tr>
<tr>
<td><strong>GAAP operating margin</strong></td>
<td>8.2%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Add: Stock-based compensation expense</td>
<td>61</td>
<td>50</td>
</tr>
<tr>
<td>Add: Amortization of capitalized stock-based compensation related to software development</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Add: Amortization of purchased intangible assets</td>
<td>20</td>
<td>19</td>
</tr>
<tr>
<td>Add: Exit costs, including restructuring costs</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td><strong>Non-GAAP Operating Income</strong></td>
<td>$210</td>
<td>$235</td>
</tr>
<tr>
<td><strong>Non-GAAP Operating Margin</strong></td>
<td>16.0%</td>
<td>17.0%</td>
</tr>
</tbody>
</table>

Please note that the figures presented above may not sum exactly due to rounding. See press release dated 2/14/18 for an explanation of presentation of Non-GAAP Financial Measures. Also, please note that all figures presented above reflect our beliefs as of February 15, 2018 only, and we undertake no obligation to update these forward-looking statements, except as required by law. In addition, forward-looking statements do not constitute guarantees of future performance. Lastly, our 2018 guidance is prior to the impact of any new accounting standards, including ASC 606, to allow for comparability against historical results.